

Anti-Phospho-GSK3A/GSK3B (Tyr216, 279) Antibody (5B984)

Product Details

Ig Type:	Rabbit IgG
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	5B984
Purification:	Affinity-chromatography

Applications

Verified Activity:	IHC image of TMAH-00900 diluted at 1:100 and staining in paraffin-embedded human pancreatic tissue performed on a Leica Bond TM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.
Application:	ELISA, IHC
Recommended	IHC:1:50-1:200.

Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	A synthetic peptide: Human Phospho-GSK3A/GSK3B (Y216 + Y279)
Antigen Species:	Human
Gene ID:	2931
Uniprot ID:	P49840
Synonyms:	Glycogen synthase kinase 3 alpha;Serine/threonine protein kinase GSK3A;Glycogen synthase kinase-3 alpha;p-GSK3A/GSK3B (Tyr216, 279);Phospho-GSK3A/GSK3B (Y216, 279);Gsk3a;p-GSK3A/GSK3B (Y216, 279);GSK-3 alpha;GSK3alpha;GSK 3A;DKFZp686D0638;GSK3A/GSK3B (p-Y216, 279);GSK3A/GSK3B (p-Tyr216, 279);GSK 3 alpha
Biology Area:	Neuroscience

Research Background

Constitutively active protein kinase that acts as a negative regulator in the hormonal control of glucose homeostasis, Wnt signaling and regulation of transcription factors and microtubules, by phosphorylating and inactivating glycogen synthase (GYS1 or GYS2), CTNNB1/beta-catenin, APC and AXIN1. Requires primed phosphorylation of the majority of its substrates. Contributes to insulin regulation of glycogen synthesis by phosphorylating and inhibiting GYS1 activity and hence glycogen synthesis. Regulates glycogen metabolism in liver, but not in muscle. May also mediate the development of insulin resistance by regulating activation of transcription factors. In Wnt signaling, regulates the level and transcriptional activity of nuclear CTNNB1/beta-catenin. Facilitates amyloid precursor protein

(APP) processing and the generation of APP-derived amyloid plaques found in Alzheimer disease. May be involved in the regulation of replication in pancreatic beta-cells. Is necessary for the establishment of neuronal polarity and axon outgrowth. Through phosphorylation of the anti-apoptotic protein MCL1, may control cell apoptosis in response to growth factors deprivation. Acts as a regulator of autophagy by mediating phosphorylation of KAT5/TIP60 under starvation conditions, leading to activate KAT5/TIP60 acetyltransferase activity and promote acetylation of key autophagy regulators, such as ULK1 and RUBCNL/Pacer. Negatively regulates extrinsic apoptotic signaling pathway via death domain receptors. Promotes the formation of an anti-apoptotic complex, made of DDX3X, BRIC2 and GSK3B, at death receptors, including TNFRSF10B. The anti-apoptotic function is most effective with weak apoptotic signals and can be overcome by stronger stimulation.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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